

$C_e = 30 + 136(30-2) = 3,838 \mu\text{g/L}$ (rounded to 3,840 prescribed as instantaneous maximum)

Based on the implementing procedures described above, effluent limitations have been calculated for all Table 1 pollutants) from the 2015 Ocean Plan and incorporated into this Order when applicable.

6. Whole Effluent Toxicity (WET)

Whole Effluent Toxicity (WET) testing protects receiving waters from the aggregate toxic effect of a mixture of pollutants in the effluent or pollutants that are not typically monitored. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a short or a longer period and may measure a sublethal endpoint such as reproduction or growth in addition to mortality. A constituent present at low concentrations may exhibit a chronic effect; however, a higher concentration of the same constituent may be required to produce an acute effect. Because of the nature of discharges into the FOTW sewershed, toxic constituents (or a mixture of constituents exhibiting toxic effects) may be present in the effluent.

A total of 39 chronic WET tests were conducted on SCI WWTP final effluent between September 2013 and March 2018. Three exceedances of the maximum daily final effluent trigger were reported for chronic toxicity and the discharger conducted the required accelerated monitoring. Due to these violations, the discharge did exhibit reasonable potential to exceed the water quality objectives for chronic toxicity at Discharge Point 002 based on 2015 Ocean Plan procedures for calculating reasonable potential.

The 2013 permit contained a final effluent trigger for chronic toxicity at Discharge Point 002. Based on RPA, this Order contains a final effluent limitation for chronic toxicity for Discharge Point 002, expressed as a maximum daily effluent limitation.

The Ocean Plan addresses the application of chronic and acute toxicity requirements based on minimum probable dilutions (D_m) for ocean discharges. Following the 2015 Ocean Plan, dischargers are required to conduct chronic toxicity monitoring for ocean discharges with D_m factors ranging from 99 to 349 and Regional Water Boards may require acute toxicity monitoring in addition to chronic toxicity monitoring. Dischargers with D_m factors below 99 are required to conduct only chronic toxicity testing. The D_m for Discharge Point 002 is 136. Since D_m is between 99 and 349, chronic toxicity monitoring is required and has been assigned a final effluent limitation to Discharge Point 002. No acute toxicity monitoring or final effluent limitations have been assigned to Discharge Point 002 consistent with 40 CFR § 122.44(d)(1)(v), the 2015 Ocean Plan, and because the chronic toxicity final effluent limitation is protective of both chronic and acute toxicity.

The 2015 Ocean Plan establishes a daily maximum chronic toxicity objective of $1.0 \text{ TUc} = 100/(\text{No Observed Effect Concentration (NOEC)})$, using a 5-concentration hypothesis test, and a daily maximum acute toxicity objective of $0.3 \text{ TUa} = 100/\text{LC50}$, using a point estimate model. This Order includes final effluent limitations using the Test of Significant Toxicity (TST) hypothesis testing approach. This statistical approach is consistent with the Ocean Plan in that it provides maximum protection to the environment since it more reliably identifies acute and chronic toxicity than the current NOEC hypothesis-testing approach (See 2015 California Ocean Plan, Section III.F and Appendix I).

On July 07, 2014, the Chief Deputy of the Water Quality Division announced that the State Water Board would be releasing a revised version of the Chronic Toxicity Plan for public comment within a few weeks. Regional Water Board staff awaits its release. Because effluent data exhibited reasonable potential to cause or contribute to an

exceedance of the water quality objective for chronic toxicity, this Order contains a numeric chronic toxicity effluent limitation. Compliance with the chronic toxicity requirement contained in this Order shall be determined in accordance with section VII.J. Nevertheless, this Order contains a reopener to allow the Regional Water Board to modify the permit in the future, if necessary, to make it consistent with any new policy, plan, law, or regulation.

For this Order, chronic toxicity in the discharge is evaluated using a maximum daily effluent limitation that utilizes USEPA's 2010 TST hypothesis testing approach. The chronic toxicity effluent limitations are expressed as "Pass" for each maximum daily individual result.

In January 2010, USEPA published a guidance document titled *EPA Regions 8, 9 and 10 Toxicity Training Tool*, which among other things discusses permit limit expression for chronic toxicity. The document acknowledges that NPDES regulations at 40 CFR § 122.45(d) require that all permit limits be expressed, unless impracticable, as a Maximum Daily Effluent Limitation (MDEL) and an Average Monthly Effluent Limitation (AMEL) for dischargers other than POTWs. USEPA recommends establishing a Maximum Daily Effluent Limitation (MDEL) for toxic pollutants and pollutants in water quality permitting, including WET. For an ocean discharge, this is appropriate because the 2015 Ocean Plan only requires a MDEL and does not include Average Monthly Effluent Limitations for chronic toxicity (See 2015 California Ocean Plan, section II.D.7.).

The MDEL is the highest allowable value for the discharge measured during a calendar day or 24-hour period representing a calendar day. The AMEL is the highest allowable value for the average of daily discharges obtained over a calendar month. For WET, this is the average of individual WET test results for that calendar month. In June 2010, USEPA published another guidance document titled *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010), in which they recommend the following: "Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program." The TST approach is another statistical option for analyzing valid WET test data. Use of the TST approach does not result in any changes to EPA's WET test methods. Section 9.4.1.2 of USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/0136, 1995), recognizes that, "the statistical methods recommended in this manual are not the only possible methods of statistical analysis." The TST approach can be applied to acute (survival) and chronic (sublethal) endpoints and is appropriate to use for both freshwater and marine EPA WET test methods.

The interpretation of the measurement result from USEPA's TST statistical approach (Pass/Fail) for effluent and receiving water samples is, by design, independent from the concentration-response patterns of the toxicity tests for samples when it is required. Therefore, when using the TST statistical approach, application of WPA's 2000 guidance on effluent and receiving waters concentration-response patterns will not improve the appropriate interpretation of TST results as long as all Test Acceptability Criteria and other test review procedures – including those related to Quality Assurance for effluent and receiving water toxicity tests, reference toxicant tests, and control performance (mean, standard deviation, and coefficient of variation) – described by the WET test methods manual and TST guidance, are followed. The 2000 guidance may be used to identify reliable, anomalous, or inconclusive concentration-response patterns and associated statistical results to the extent that the guidance recommends review of test procedures and laboratory performance already recommended in the WET test methods

manual. The guidance does not apply to single concentration (IWC) and control statistical t-tests and does not apply to the statistical assumptions on which the TST is based. The Regional Water Board and USEPA will not consider a concentration-response pattern as sufficient basis to determine that a TST t-test result for a toxicity test is anything other than valid, absent other evidence. In a toxicity laboratory, unexpected concentration-response patterns should not occur with any regular frequency and consistent reports of anomalous or inconclusive concentration-response patterns or test results that are not valid will require an investigation of laboratory practices.

Any Data Quality Objectives or Standard Operating Procedure used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent or receiving water toxicity test measurement results from the TST statistical approach which include a consideration of concentration-response patterns and/or Percent Minimum Significant Difference (PMSDs) must be submitted for review by the Regional Water Board, in consultation with USEPA and the State Water Board's Quality Assurance Officer and Environmental Laboratory Accreditations Program (40 CFR § 122.44(h)). The PMSD criteria only apply to compliance for NOEC and the sublethal endpoints of the NOEC, and therefore are not used to interpret TST results.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. Section 402(o)(1)/303(d)(4) of the Clean Water Act (CWA) provides statutory exceptions to the general prohibition of backsliding contained in CWA section 402(o)(1)/303(d)(4). The final effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, Order No. R4-2013-0111, with one exception. The final effluent limitations for DDT were removed because new monitoring data indicated that the final effluent did not have reasonable potential to cause or contribute to an exceedance of the applicable water quality objectives.

2. Antidegradation Policies

This Order includes both narrative and numeric final effluent limitations, receiving water limitations, and performance goals, and mass emission benchmarks to maintain the chemical, physical, and biological characteristics, and to protect the beneficial uses, of the receiving water. These requirements ensure that all water quality objectives are being met outside the zone of initial dilution, thereby maintaining the beneficial uses. The 2015 Ocean Plan allows for minimal degradation within the zone of initial dilution as long as the water quality objectives are maintained just outside the zone of initial dilution. The minimal degradation permitted by the 2015 Ocean Plan is consistent with the antidegradation policy because it maintains maximum benefit to the people of the State, it will not unreasonably affect the present and anticipated beneficial uses, and it will not result in water quality less than that prescribed in the policies.

The final effluent limitations from the previous order have been retained in this Order because the pollutants continue to show reasonable potential to cause or contribute to an exceedance of the water quality objectives in the Ocean Plan.

This Order includes new final effluent limitations for copper, zinc, and chronic toxicity, in addition to the final effluent limitations from the previous permit for total residual chlorine, and TCDD equivalents. The final effluent limitations (and the reasonable potential analyses) are calculated using the dilution ratio of 136:1. Mass emission final effluent limitations continue to be based on the design flow rate of the treatment plant under the

~~2000 Order of~~ 0.025 mgd to comply with ASBS requirements. As a result, both the quantity of the discharged pollutants and quality of the discharge are expected to remain relatively constant or improve during this permit term, consistent with antidegradation policies. The accompanying MRP requires continued data collection and if monitoring data show reasonable potential for a pollutant to cause or contribute to an exceedance of water quality objectives, the permit may be reopened to incorporate appropriate WQBELs. Such an approach ensures that the discharge will adequately protect the beneficial uses and conforms to antidegradation policies and antibacksliding provisions.

The performance goals are an additional incentive for the Discharger to maintain the current treatment quality since then performance goals set final effluent targets for the Discharger to meet based on current performance. Some performance goals in this Order are more stringent due to improved performance; however, the performance goals for some constituents have increased. Since the performance goals are based on performance and do not exceed the water quality objectives for the receiving water, the increase of any performance goal is not expected to result in additional degradation.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand, total suspended solids, settleable solids, pH, oil and grease, and turbidity. Restrictions on these pollutants are discussed in section IV.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating individual water quality-based effluent limitations for priority pollutants are based on the 2015 Ocean Plan, which became effective on January 28, 2016. All beneficial uses and water quality objectives contained in the Basin Plan were approved under State law and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA and applicable water quality standards.

Table F-12. Summary of Final Effluent Limitations for Discharge Point 002

Parameter	Units	Effluent Limitations ³				Performance Goal	Basis
		Average Monthly ⁴	Average Weekly	Maximum Daily ⁵	Instantaneous Maximum ⁶		
BOD ₅ 20°C	mg/L	30	45	--	--	--	Secondary treatment standard/ ASBS/ Existing
	lbs/day ⁷	6.3	9.4	19	--		
TSS	mg/L	30	45	--	--	--	Secondary treatment standard/ ASBS/ Existing
	lbs/day ⁷	6.3	9.4	19	--		
Removal Efficiency for BOD	%	85	--	--	--	--	Secondary treatment standard/ Existing
Removal Efficiency for TSS	%	85	--	--	--	--	Secondary treatment standard/ Existing
Temperature	°F	--	--	--	100	--	Thermal Plan/ Existing
pH	pH Unit	6.0 (instantaneous minimum) – 9.0 (instantaneous maximum)					Secondary treatment standard/ Existing
Oil and Grease	mg/L	25	40	--	75	--	Secondary treatment standard/ Existing
	lbs/day ⁷	5.2	8.3	--	15	--	
Settleable Solids	mL/L	1.0	1.5	--	3.0	--	Secondary treatment

³ The minimum dilution ratio used to calculate effluent limitations for nonconventional and toxic pollutants for Discharge Point 002 is 136:1 for all pollutants (i.e. 136 parts seawater to one part effluent).

⁴ For intermittent discharges, the daily value used to calculate these average monthly values shall be considered to equal zero for days on which no discharge occurred.

⁵ The maximum daily effluent limitations shall apply to flow weighted 24-hour composite samples.

⁶ The instantaneous maximum effluent limitations shall apply to grab samples.

⁷ The mass emission rates are calculated using a maximum flow rate of 0.025 mgd, consistent with water-quality based limits in the previous permit.: lbs/day = 0.00834 x Ce (effluent concentration in µg/L) x Q (flow rate in mgd). During storm events when flow exceeds 0.025 mgd, the mass emission rate limitations shall not apply.

Parameter	Units	Effluent Limitations ³				Performance Goal	Basis
		Average Monthly ⁴	Average Weekly	Maximum Daily ⁵	Instantaneous Maximum ⁶		
							standard/ Existing
Turbidity	NTU	75	100	--	225	--	Secondary treatment standard/ Existing
Marine Aquatic Life Toxicants							
Arsenic	µg/L	--	--	--	--	3.0	No RP
Cadmium	µg/L	--	--	--	--	1.0	No RP
Chromium (VI)	µg/L	--	--	--	--	25	No RP
Copper	µg/L	139	--	1,370	3,840	--	RP/ Ocean Plan
	lbs/day ⁷	0.029	--	0.29	0.80		
Lead	µg/L	--	--	--	--	2.5	No RP
Mercury	µg/L	--	--	--	--	2.5	No RP
Nickel	µg/L	--	--	--	--	8.0	No RP
Selenium	µg/L	--	--	--	--	1.1	No RP
Silver	µg/L	--	--	--	--	1.0	No RP
Zinc	µg/L	1,650	--	9,870	26,310	--	RP/ Ocean Plan
	lbs/day ⁷	0.34	--	2.1	5.5		
Cyanide	µg/L	--	--	--	--	27	No RP
Ammonia as Nitrogen	mg/L	--	--	--	--	6.4	No RP
Total Residual Chlorine ⁸	mg/L	0.274	--	0.1 ⁹	8.2	--	RP/ Ocean Plan/ Anti-backsliding/ Existing
	lbs/day ⁷	0.06	--	0.021	1.7		

⁸ These total chlorine residual final effluent limitations shall only apply to continuous discharges exceeding two hours. For intermittent discharges not exceeding two hours, final effluent limitations for total chlorine residual shall be determined using the procedures outlined in section III.C.4.a of the Ocean Plan, a minimum dilution ratio of 136:1, the water quality objectives in Table 1 of the Ocean Plan, and the following equation:

$$\text{Log } y = -0.43(\log x) + 1.8$$

Where y = the water quality objective (in µg/L) to apply when chlorine is being discharged

x = duration of uninterrupted chlorine discharge in minutes

⁹ The total residual chlorine final effluent limitation was carried over from Order No. R4-2013-0111 per 40 CFR 122.44(l)(1).

Parameter	Units	Effluent Limitations ³				Performance Goal	Basis
		Average Monthly ⁴	Average Weekly	Maximum Daily ⁵	Instantaneous Maximum ⁶		
Chronic Toxicity ^{10,11} (TST)	Pass or Fail	--	--	Pass	--	--	RP/ Ocean Plan
Phenolic compounds (non-chlorinated) ¹²	µg/L	--	--	--	--	5.0	No RP
Phenolic compounds (chlorinated) ¹²	µg/L	--	--	--	--	5.0	No RP
Endosulfan ¹²	µg/L	--	--	--	--	0.05	No RP
Endrin	µg/L	--	--	--	--	0.05	No RP
HCH ¹²	µg/L	--	--	--	--	0.025	No RP
Radioactivity							
Gross alpha	pCi/L	--	--	--	--	12	No RP
Gross beta	pCi/L	--	--	--	--	11	No RP
Human Health Toxicants – Non-Carcinogens							
Acrolein	µg/L	--	--	--	--	25	No RP
Antimony	µg/L	--	--	--	--	1.9	No RP
Bis(2-chloroethoxy) methane	µg/L	--	--	--	--	25	No RP
Bis(2-chloroisopropyl) ether	µg/L	--	--	--	--	10	No RP
Chlorobenzene	µg/L	--	--	--	--	10	No RP
Chromium (III)	µg/L	--	--	--	--	2.5	No RP
Di-n-butyl-phthalate	µg/L	--	--	--	--	50	No RP
Dichlorobenzenes ¹²	µg/L	--	--	--	--	5.0	No RP
Diethyl phthalate	µg/L	--	--	--	--	10	No RP

¹⁰ The chronic toxicity final effluent limitation is protective of both the numeric acute and chronic toxicity 2015 Ocean Plan water quality objectives. The final effluent limitation will be implemented using *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995), current USEPA guidance in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, June 2010) (http://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf) and USEPA Regions 8, 9, and 10, *Toxicity Training Tool* (January 2010).

¹¹ The Maximum Daily Effluent Limitation (MDEL) shall be reported as "Pass" or "Fail," and percent effect. See section V.A.5.a. of the MRP.

¹² See Attachment A for definitions of terms.

Parameter	Units	Effluent Limitations ³				Performance Goal	Basis
		Average Monthly ⁴	Average Weekly	Maximum Daily ⁵	Instantaneous Maximum ⁶		
Dimethyl phthalate	µg/L	--	--	--	--	10	No RP
4,6-dinitro-2-methylphenol	µg/L	--	--	--	--	25	No RP
2,4-Dinitrophenol	µg/L	--	--	--	--	25	No RP
Ethylbenzene	µg/L	--	--	--	--	10	No RP
Fluoranthene	µg/L	--	--	--	--	0.25	No RP
Hexachloro-cyclopentadiene	µg/L	--	--	--	--	25	No RP
Nitrobenzene	µg/L	--	--	--	--	5.0	No RP
Thallium	µg/L	--	--	--	--	5.0	No RP
Toluene	µg/L	--	--	--	--	10	No RP
Tributyltin	ng/L	--	--	--	--	3.9	No RP
1,1,1-Trichloroethane	µg/L	--	--	--	--	10	No RP
Human Health Toxicants – Carcinogens							
Acrylonitrile	µg/L	--	--	--	--	10	No RP
Aldrin	µg/L	--	--	--	--	0.003	No RP
Benzene	µg/L	--	--	--	--	10	No RP
Benzidine	µg/L	--	--	--	--	0.0095	No RP
Beryllium	µg/L	--	--	--	--	2.5	No RP
Bis(2-chloroethyl) ether	µg/L	--	--	--	--	5.0	No RP
Bis(2-ethylhexyl) phthalate	µg/L	--	--	--	--	39	No RP
Carbon tetrachloride	µg/L	--	--	--	--	10	No RP
Chlordane ¹²	µg/L	--	--	--	--	0.0032	No RP
Chlorodibromomethane	µg/L	--	--	--	--	22	No RP
Chloroform	µg/L	--	--	--	--	51	No RP
DDT ¹²	µg/L	--	--	--	--	0.023	No RP
1,4-Dichlorobenzene	µg/L	--	--	--	--	10	No RP
3,3'-Dichlorobenzidine	µg/L	--	--	--	--	1.0	No RP
1,2-Dichloroethane	µg/L	--	--	--	--	10	No RP
1,1-Dichloroethylene	µg/L	--	--	--	--	10	No RP

Parameter	Units	Effluent Limitations ³				Performance Goal	Basis
		Average Monthly ⁴	Average Weekly	Maximum Daily ⁵	Instantaneous Maximum ⁶		
Dichlorobromomethane	µg/L	--	--	--	--	39	No RP
Dichloromethane	µg/L	--	--	--	--	10	No RP
1,3-Dichloropropene	µg/L	--	--	--	--	10	No RP
Dieldrin	µg/L	--	--	--	--	0.0055	No RP
2,4-Dinitrotoluene	µg/L	--	--	--	--	25	No RP
1,2-Diphenylhydrazine	µg/L	--	--	--	--	5.0	No RP
Halomethanes ¹²	µg/L	--	--	--	--	10	No RP
Heptachlor	µg/L	--	--	--	--	0.0069	No RP
Heptachlor epoxide	µg/L	--	--	--	--	0.0027	No RP
Hexachlorobenzene	µg/L	--	--	--	--	0.029	No RP
Hexachlorobutadiene	µg/L	--	--	--	--	5.0	No RP
Hexachloroethane	µg/L	--	--	--	--	5.0	No RP
Isophorone	µg/L	--	--	--	--	5.0	No RP
N-Nitrosodimethylamine	µg/L	--	--	--	--	25	No RP
N-Nitrosodi-N-propylamine	µg/L	--	--	--	--	25	No RP
N-Nitrosodiphenylamine	µg/L	--	--	--	--	5.0	No RP
PAHs ¹²	µg/L	--	--	--	--	0.25	No RP
Total PCBs	µg/L	--	--	--	--	0.0026	No RP
TCDD equivalents ¹²	pg/L	0.53	--	--	--	--	RP/ Ocean Plan/ Existing
	lbs/day	1.1x10 ⁻¹⁰	--	--	--		
1,1,2,2-Tetrachloroethane	µg/L	--	--	--	--	10	No RP
Tetrachloroethylene	µg/L	--	--	--	--	10	No RP
Toxaphene	µg/L	--	--	--	--	0.029	No RP
Trichloroethylene	µg/L	--	--	--	--	10	No RP
1,1,2-Trichloroethane	µg/L	--	--	--	--	10	No RP

Parameter	Units	Effluent Limitations ³				Performance Goal	Basis
		Average Monthly ⁴	Average Weekly	Maximum Daily ⁵	Instantaneous Maximum ⁶		
2,4,6-Trichlorophenol	µg/L	--	--	--	--	40	No RP
Vinyl chloride	µg/L	--	--	--	--	10	No RP

E. Interim Effluent Limitations (Not Applicable)

F. Land Discharge Specifications (Not Applicable)

G. Recycling Specifications (Not Applicable)

V. PERFORMANCE GOALS

Section III.F.1, of the 2015 Ocean Plan allows the Regional Water Board to establish more restrictive water quality objectives and effluent limitations than those set forth in the Ocean Plan as necessary for the protection of the beneficial uses of ocean waters.

Pursuant to this provision and to implement the recommendation of the Water Quality Advisory Task Force (Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September 30, 1993) that was adopted by the Regional Water Board on November 1, 1993, performance goals that are more stringent than those based on Ocean Plan objectives are prescribed in this Order. This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques. However, this approach does not address substantial changes in treatment plant operations that could significantly affect the quality of the treated effluent.

While performance goals were previously placed in many POTW permits in this region, they have been discontinued for inland surface water discharges. For inland surface waters, the California Toxics Rule (40 CFR § 131.38) has resulted in effluent limitations as stringent as many performance goals. However, the Ocean Plan allows for significant dilution, and the continued use of performance goals serves to maintain existing treatment levels and effluent quality and supports State and federal antidegradation policies.

The performance goals are based upon the actual performance of the SCI WWTP and are specified only as an indication of the treatment efficiency of the Facility. Performance goals are intended to minimize pollutant loading (primarily for toxics), while maintaining the incentive for future voluntary improvement of water quality whenever feasible, without the imposition of more stringent limits based on improved performance. They are not considered enforceable limitations or standards for the regulation of the discharge from the treatment facility. The Executive Officer may modify any of the performance goals if the Discharger requests and has demonstrated that the change is warranted.

Procedures for the Determination of Performance Goals

- A. For constituents that have been routinely detected in the effluent (at least 20 percent detectable data), performance goals are based on the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent performance data (UCB_{95/95}) from January 2013 through March 2018 using the RPA protocol contained in the 2015 Ocean Plan. Effluent data are assumed log normally distributed. Performance goals are calculated according to the equation $C_{PG} = C_o + D_m(C_o - C_s)$ and setting $C_o = UCB_{95/95}$.

1. If the maximum detected effluent concentration (MEC) is greater than the calculated performance goal, then the calculated performance goal is used as the performance goal; or
2. If the maximum detected effluent concentration is less than the calculated performance goal, then the MEC is used as the performance goal.
3. If the performance goal determined in part 1 or 2 is greater than the Water Quality Objective (WQO) in the 2015 Ocean Plan after considering dilution, then the WQO is used as the performance goal.

For example, the performance goals for ~~chloroform~~nickel, arsenic, and ~~heptachlor~~dieldrin at Discharge Point 002 are calculated as follows:

Nickel

$C_o = UCB_{95/95} = 0.08 \text{ } \mu\text{g/L}$; $D_m = 136$; $C_s = \text{background seawater concentration} = 0 \text{ } \mu\text{g/L}$; $MEC = 8.0 \text{ } \mu\text{g/L}$; $C_{PG} = \text{Performance Goal} = (0.08 \text{ } \mu\text{g/L}) + 136(0.08 \text{ } \mu\text{g/L} - 0 \text{ } \mu\text{g/L}) = 11.6 \text{ } \mu\text{g/L}$.

Since the MEC of $8.0 \text{ } \mu\text{g/L}$ is less than the calculated PG of $11.6 \text{ } \mu\text{g/L}$, the prescribed performance goal for ~~chloroform~~nickel is $8.0 \text{ } \mu\text{g/L}$.

Arsenic

$C_o = UCB_{95/95} = 3 \text{ } \mu\text{g/L}$; $D_m = 136$; $C_s = \text{background seawater concentration} = 3 \text{ } \mu\text{g/L}$; $MEC = 8.07 \text{ } \mu\text{g/L}$; $C_{PG} = \text{Performance Goal} = (3 \text{ } \mu\text{g/L}) + 136(3 \text{ } \mu\text{g/L} - 3 \text{ } \mu\text{g/L}) = 3 \text{ } \mu\text{g/L}$.

Since the MEC of $8.07 \text{ } \mu\text{g/L}$ is greater than the calculated PG of $3 \text{ } \mu\text{g/L}$, the prescribed performance goal for arsenic is $3 \text{ } \mu\text{g/L}$.

Dieldrin

$C_o = UCB_{95/95} = \text{N/A (all ND)}$; $C_o = WQO = 0.00004 \text{ } \mu\text{g/L}$; $D_m = 136$; $C_s = \text{background seawater concentration} = 0 \text{ } \mu\text{g/L}$; $MEC = \text{N/A (all ND)}$; $C_{PG} = \text{Performance Goal} = (0.00004 \text{ } \mu\text{g/L}) + 136(0.00004 \text{ } \mu\text{g/L} - 0 \text{ } \mu\text{g/L}) = 0.0055 \text{ } \mu\text{g/L}$.

Since there were no detections, the WQO is used to calculate the performance goal, so the prescribed performance goal for dieldrin is $0.0055 \text{ } \mu\text{g/L}$.

- B. For constituents where monitoring data have consistently shown nondetectable levels (less than 20 percent detectable data), performance goals are set at five times the Minimum Levels listed in the 2015 Ocean Plan. If the maximum detected effluent concentration is less than the calculated value based on the ML, then the MEC is used as the performance goal.
- C. For constituents with effluent limitations, if the performance goal derived from the steps above exceeds a respective effluent limitation, then a performance goal is not prescribed for that constituent.

Performance goals for Discharge Point 002 are prescribed in this Order. The listed performance goals are not enforceable effluent limitations or standards. The Discharger shall maintain, if not improve, its treatment efficiency. Any two consecutive exceedances of the performance goals shall trigger an investigation into the cause of the exceedance. If the exceedance persists in three successive monitoring periods, the Discharger shall submit a written report to the Regional Water Board and USEPA on the nature of the exceedance, the results of the investigation as to the cause of the exceedance, and the corrective actions taken or proposed corrective measures with timetable for implementation, if necessary.

VI. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Ocean Plan and Basin Plan contain numeric and narrative water quality standards applicable to surface waters within the Los Angeles Region. Water quality objectives include a policy to maintain the high-quality waters pursuant to federal regulations (40 CFR § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in the Order are included to ensure protection of beneficial uses of the receiving water.

B. Groundwater (Not Applicable)

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR § 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR § 122.42, are provided in Attachment D to the order.

Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR § 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 CFR § 123.25. The Regional Water Board may reopen the Order to modify conditions and requirements. Causes for modifications can include, but are not limited to, the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Ocean Plan and Basin Plan.

2. Special Studies and Additional Monitoring Requirements

- a. **Antidegradation Analysis and Engineering Report for Proposed Plant Expansion.** This provision is based on the State Water Board Resolution No. 68-16, which requires the Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state. The Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. This provision requires the Discharger to clarify that it has increased plant capacity through the addition of new treatment system(s) to obtain alternative effluent limitations for the discharge from the treatment system(s). This provision requires the Discharger to report specific time schedules for the plant's projects. This provision requires the Discharger to submit a report to the Regional Water Board for approval.
- b. **Operations Plan for Proposed Expansion.** This provision is based on section 13385(j)(1)(D) of the CWC and allows a time period not to exceed 90 days in which the Discharger may adjust and test the treatment system(s). This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.

- c. **Treatment Plant Capacity.** The treatment plant capacity study required by this Order shall serve as an indicator for the Regional Water Board regarding the Facility's increasing hydraulic capacity and growth in the service area.
- d. **Toxicity Reduction Evaluation (TRE) Requirements.** If the discharge consistently exceeds an effluent limitation for toxicity as specified in this Order, the Discharger shall conduct a TRE as detailed in section V of the MRP (Attachment E). The TRE will help the Discharger identify the possible source(s) of toxicity. The Discharger shall take all reasonable steps to reduce toxicity to the required level.
- e. **ASBS Compliance.** The discharge from the Facility is located within a designated ASBS but the State Water Board has authorized this discharge if specific conditions are met. One such condition is that the Discharger shall demonstrate through monitoring that the effluent (1) does not alter the natural water quality (that is, it is undetectable) beyond a radius of 1,000 feet from the outfall's terminus and (2) complies with the Ocean Plan-based limitations. The Order ensures the Discharger will satisfy this requirement because it requires that the Discharger monitor water quality (at the boundary of the exclusion zone which is within 1,000 feet of the initial point of discharge) at a single down-current location, at the first trapping depth, to demonstrate that natural water quality is not altered in the ASBS outside of the exclusion zone when compared to an unaffected reference site.
- f. **Evaluation of Minimum Initial Dilution**

The State Water Board applied data from the California Cooperative Oceanic Fisheries Investigations nearshore stations surveyed in the summers 2010 and 2011 to evaluate the minimum initial dilution for Discharge Point 002. Based on the results, State Water Board staff agreed with the original Navy report suggesting 136 as the value for minimum initial dilution as defined in the 2009 California Ocean Plan for use in the Order. However, neither the ambient data used by staff to model near-field mixing nor the ambient data used by the Navy's consultant represent actual site receiving water conditions. As a result, the Navy collected salinity and temperature data throughout the water column near the outfall in areas unaffected by the plume for two summers during the previous permit cycle. This study will evaluate the minimum initial dilution using more relevant data to ensure the dilution ratio applied in this permit is protective of the beneficial uses of the receiving water.

3. **Best Management Practices and Pollution Prevention**

a. **Spill Clean-Up Contingency Plan (SCCP)**

Since spills or overflows are a common event at the FOTW, this Order requires the Discharger to review and update, if necessary, its SCCP after each incident. The Discharger shall ensure that the up-to-date SCCP is readily available to the sewage system personnel at all times and that the sewage personnel are familiar with it.

b. **Pollutant Minimization Program (PMP)**

This provision is based on the requirements of section III.C.9 of the 2015 Ocean Plan.

4. **Construction, Operation, and Maintenance Specifications**

This provision is based on the requirements of 40 CFR §122.41(e) and the previous Order.

5. **Special Provisions for Federally-Owned Treatment Works (FOTWs)**

- a. **Sanitary Sewer Overflows.** The CWA prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an

NPDES permit (33 United States Code sections 1311, 1342). Pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR 122.41(e)), report any noncompliance (40 CFR 122.41(1)(6) and (7)), and mitigate any discharge from the collection system in violation of this NPDES permit (40 CFR 122.41(d)). As such, the Discharger must comply with all requirements in Attachment I. The requirements contained in this Order in Attachment I, sections VI.C.3.b. (Spill Clean-up Contingency Plan), VI.C.4. (Construction, Operation, and Maintenance Specifications Section), and VI.C.6. (Spill Reporting Requirements are intended to be consistent with the requirements from the SSO WDR.

- b. **Sludge (Biosolids) Requirements.** To implement CWA section 405(d), on February 19, 1993, USEPA promulgated 40 CFR § 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the Discharger to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program.
- c. **Spill Reporting Requirements.** This Order established a reporting protocol for how different types of spills, overflows, and bypasses of raw or partially treated sewage from the FOTW shall be reported to regulatory agencies. Refer to spill reporting requirements in section VI.C.6. and Attachment I for additional requirements and information.
- d. **Collection System.** The Discharger's collection system is part of the FOTW that is subject to this Order. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system (40 CFR part 122.41(e)), report any noncompliance (40 CFR parts 122.41(l)(6) and (7)), and mitigate any discharge from the collection system in violation of the permit (40 CFR 122.41(d)). See attachment D, subsections I.D, V.E, V.H, and I.C, and the Spill Reporting Requirements of this Order.

6. Compliance Schedules (Not Applicable)

VIII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

Influent monitoring is required to determine compliance with NPDES permit conditions and assess treatment plant performance. The influent monitoring in this Order follows the influent monitoring requirements in the previous Order.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharge to evaluate compliance with permit limitations and conditions. Monitoring requirements are specified in the Monitoring and Reporting Program (Attachment E). This Order requires compliance with the Monitoring and Reporting Program, and is based on 40 CFR § 122.48, 122.44(i), 122.41(j), 122.62, 122.63, and 124.5. The Monitoring and Reporting Program is a standard

requirement in NPDES permits (including this Order) issued by the Regional Water Board or USEPA. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board and USEPA policies. The Monitoring and Reporting Program also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

Monitoring for those pollutants expected to be present in the discharge from the facility, will be required as shown on the proposed Monitoring and Reporting Program (Attachment E) and as required in the Ocean Plan.

Monitoring frequency for the constituents is based on historic monitoring frequency, Best Professional Judgment, and the following criteria:

Criterion 1: Monitoring frequency will be monthly for those pollutants with reasonable potential to exceed water quality objectives (monitoring has shown an exceedance of the objectives);

Criterion 2: Monitoring frequency will be quarterly for those pollutants in which some or all of the historic effluent monitoring data detected the pollutants, but without reasonable potential to exceed water quality objectives;

Criterion 3: Monitoring frequency will be semiannually for those pollutants in which all of the historic effluent monitoring data are not detected and do not have reasonable potential to exceed water quality objectives.

Table F-13. Effluent Monitoring Frequency Comparison

Parameter	Monitoring Frequency (2013 Order)	Monitoring Frequency (2018 Order)	Basis
Flow	Continuous	No Change	BPJ
BOD ₅ 20°C	Monthly	No Change	BPJ
Total Suspended Solids	Monthly	No Change	BPJ
pH	Monthly	No Change	BPJ
Oil and Grease	Monthly	No Change	BPJ
Temperature	Monthly	No Change	BPJ
Settleable Solids	Monthly	No Change	BPJ
Dissolved Oxygen	Monthly	No Change	BPJ
Turbidity	Monthly	No Change	BPJ
Total Coliform	Monthly	No Change	BPJ
<i>Enterococcus</i>	Monthly	No Change	BPJ
Fecal Coliform	Monthly	No Change	BPJ
Arsenic	Semiannually	Quarterly No Change	Criterion 2 BPJ
Cadmium	Semiannually	No Change	Criterion 3
Chromium (VI)	Semiannually	No Change	BPJ
Copper	Quarterly	Monthly	Criterion 1
Lead	Semiannually	Quarterly No Change	Criterion 2 BPJ

Parameter	Monitoring Frequency (2013 Order)	Monitoring Frequency (2018 Order)	Basis
Mercury	Semiannually	Quarterly	Criterion 2
Nickel	Semiannually	<u>Quarterly</u> No Change	<u>Criterion 2</u> BPJ
Selenium	Semiannually	No Change	BPJ
Silver	Semiannually	No Change	Criterion 3
Zinc	Quarterly	Monthly	Criterion 1
Cyanide	Semiannually	<u>Quarterly</u> No Change	<u>Criterion 2</u> BPJ
Total Residual Chlorine	Monthly	No Change	Criterion 1
Ammonia Nitrogen	Semiannually	Quarterly	Criterion 2
Nitrate Nitrogen	Semiannually	No Change	BPJ
Nitrite Nitrogen	Semiannually	No Change	BPJ
Organic Nitrogen	Semiannually	No Change	BPJ
Toxicity, Chronic	Quarterly	No Change	BPJ
Phenolic Compounds (non-chlorinated)	Semiannually	No Change	Criterion 3
Phenolic Compounds (chlorinated)	Semiannually	No Change	Criterion 3
Endosulfan	Semiannually	<u>Quarterly</u> No Change	<u>Criterion 2</u> BPJ
Endrin	Semiannually	No Change	Criterion 3
HCH	Semiannually	Quarterly	Criterion 2
Radioactivity (including gross alpha, gross beta, combined radium-226 & radium-228, tritium, strontium-90 and uranium)	Semiannually	Semiannually	Criterion 2
Acrolein	Semiannually	No Change	Criterion 3
Antimony	Semiannually	No Change	BPJ
Bis(2-chloroethoxy) methane	Semiannually	No Change	Criterion 3
Bis(2-chloroisopropyl) ether	Semiannually	No Change	Criterion 3
Chlorobenzene	Semiannually	No Change	Criterion 3
Chromium (III)	Semiannually	No Change	BPJ
Di-n-butyl-phthalate	Semiannually	No Change	Criterion 3
Dichlorobenzenes	Semiannually	No Change	Criterion 3
Diethyl phthalate	Semiannually	No Change	Criterion 3
Dimethyl phthalate	Semiannually	No Change	Criterion 3
4,6-dinitro-2-methylphenol	Semiannually	No Change	Criterion 3
2,4-Dinitrophenol	Semiannually	No Change	Criterion 3

Parameter	Monitoring Frequency (2013 Order)	Monitoring Frequency (2018 Order)	Basis
Ethylbenzene	Semiannually	No Change	Criterion 3
Fluoranthene	Semiannually	No Change	Criterion 3
Hexachlorocyclopentadiene	Semiannually	No Change	Criterion 3
Nitrobenzene	Semiannually	No Change	Criterion 3
Thallium	Semiannually	No Change	Criterion 3
Toluene	Semiannually	No Change	Criterion 3
Tributyltin	Semiannually	<u>Quarterly</u> No Change	<u>Criterion 2</u> BPJ
1,1,1-Trichloroethane	Semiannually	No Change	Criterion 3
Acrylonitrile	Semiannually	No Change	Criterion 3
Aldrin	Semiannually	No Change	Criterion 3
Benzene	Semiannually	No Change	Criterion 3
Benzidine	Semiannually	No Change	Criterion 3
Beryllium	Semiannually	No Change	Criterion 3
Bis(2-chloroethyl) ether	Semiannually	No Change	Criterion 3
Bis(2-ethylhexyl) phthalate	Semiannually	<u>Quarterly</u> No Change	<u>Criterion 2</u> BPJ
Carbon tetrachloride	Semiannually	No Change	Criterion 3
Chlordane	Semiannually	No Change	BPJ
Chlorodibromomethane	Semiannually	<u>Quarterly</u> No Change	<u>Criterion 2</u> BPJ
Chloroform	Semiannually	<u>Quarterly</u> No Change	<u>Criterion 2</u> BPJ
DDT	Quarterly	Semiannually	Criterion 3
1,4-dichlorobenzene	Semiannually	No Change	Criterion 3
3,3'-dichlorobenzidine	Semiannually	No Change	Criterion 3
1,2-Dichloroethane	Semiannually	No Change	Criterion 3
1,1-Dichloroethylene	Semiannually	No Change	Criterion 3
Dichlorobromomethane	Semiannually	<u>Quarterly</u> No Change	<u>Criterion 2</u> BPJ
Dichloromethane	Semiannually	No Change	BPJ
1,3-Dichloropropene	Semiannually	No Change	Criterion 3
Dieldrin	Semiannually	No Change	Criterion 3
2,4-dinitrotoluene	Semiannually	No Change	Criterion 3
1,2-diphenylhydrazine	Semiannually	No Change	Criterion 3
Halomethanes	Semiannually	No Change	BPJ
Heptachlor	Semiannually	Quarterly	Criterion 2
Heptachlor epoxide	Semiannually	Quarterly	Criterion 2
Hexachlorobenzene	Semiannually	No Change	Criterion 3
Hexachlorobutadiene	Semiannually	No Change	Criterion 3

Parameter	Monitoring Frequency (2013 Order)	Monitoring Frequency (2018 Order)	Basis
Hexachloroethane	Semiannually	No Change	Criterion 3
Isophorone	Semiannually	No Change	Criterion 3
N-Nitrosodimethylamine	Semiannually	No Change	Criterion 3
N-Nitrosodi-N-propylamine	Semiannually	No Change	Criterion 3
N-Nitrosodiphenylamine	Semiannually	No Change	Criterion 3
PAHs	Semiannually	No Change	Criterion 3
PCBs as Aroclors	Semiannually	No Change	Criterion 3
TCDD Equivalents	Quarterly	Monthly	Criterion 1
1,1,2,2-Tetrachloroethane	Semiannually	No Change	Criterion 3
Tetrachloroethylene	Semiannually	No Change	Criterion 3
Toxaphene	Semiannually	No Change	Criterion 3
Trichloroethylene	Semiannually	No Change	Criterion 3
1,1,2-Trichloroethane	Semiannually	No Change	Criterion 3
2,4,6-Trichlorophenol	Semiannually	No Change	Criterion 3
Vinyl chloride	Semiannually	No Change	Criterion 3

C. Whole Effluent Toxicity Testing Requirements

The rationale for WET has been discussed extensively in Section IV.C.6. of this Fact Sheet.

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water. Requirements are based on the Ocean Plan and the Basin Plan. The conceptual framework for the receiving water program has three components that comprise a range of spatial and temporal scales: (a) core monitoring; (b) regional monitoring; and (c) special studies.

- a. Core monitoring is local in nature and focused on monitoring trends in water quality and the effect of the point source discharge on the receiving water. This includes effluent monitoring as well as many aspects of receiving water monitoring. In the monitoring program described below these core components are typically referred to as local monitoring.
- b. Regional monitoring is focused on questions that are best answered by a region-wide approach that incorporates coordinated survey design and sampling techniques. The major objective of regional monitoring is to collect information required to assess how safe it is to swim in the ocean, how safe it is to eat seafood from the ocean, and whether the marine ecosystem is being protected. Key components of regional monitoring include elements to address pollutant mass emission estimations, public health concerns, monitoring of trends in natural resources, assessment of regional impacts from all contaminant sources, and protection of beneficial uses. The final design of regional monitoring programs is developed by means of steering committees and technical committees comprised of participating agencies and organizations and is not specified in this Order.

The Discharger is encouraged to participate in regional monitoring activities coordinated by the SCCWRP or any other appropriate agency approved by the Regional Water Board. The procedures and time lines for the Regional Water Board approval shall be the same as detailed for special studies, below.

- c. Special studies are focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale, although multiyear studies also may be needed. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes in the area of the discharge, or development of monitoring techniques, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot be typically anticipated in advance of the five-year permit cycle.
- d. The receiving water monitoring program contains the following core and regional components: shoreline and offshore water quality monitoring; and benthic infauna monitoring. Local and regional survey questions, sampling designs, monitoring locations, and other specific monitoring requirements are detailed in the MRP.

2. Groundwater (Not Applicable)

E. Other Monitoring Requirements

1. Outfall and Diffuser Inspection

This survey investigates the condition of the outfall structure to determine if the structures are in serviceable condition to ensure their continued safe operation. The data collected will be used for a periodic assessment of the integrity of the outfall pipes and ballasting system.

2. Biosolids and Sludge Management

Attachment H establishes monitoring and reporting requirements for the storage, handling and disposal practices of biosolids/sludge generated from the operation of this FOTW.

3. Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program

Under the authority of section 308 of the CWA (33 U.S.C. § 1318), USEPA requires major and selected minor dischargers under the NPDES Program to participate in the annual DMR-QA Study Program. The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits. There are two options to satisfy the requirements of the DMR-QA Study Program: (1) The Discharger can obtain and analyze a DMR-QA sample as part of the DMR-QA Study; or (2) Per the waiver issued by USEPA to the State Water Board, the Discharger can submit the results of the most recent Water Pollution Performance Evaluation Study from its own laboratories or its contract laboratories. A Water Pollution Performance Evaluation Study is similar to the DMR-QA Study. Thus, it also evaluates a laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES Program. The Discharger shall ensure that the results of the DMR-QA Study or the results of the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board. The State Water Board's Quality Assurance Program Officer will send the DMR-QA Study results or the results of the most recent Water Pollution Performance Evaluation Study to USEPA's DMR-QA Coordinator and Quality Assurance Manager.

IX. PUBLIC PARTICIPATION

The Regional Water Board has considered the issuance of WDRs that will serve as an NPDES permit for the San Clemente Island Wastewater Treatment Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. ~~Notification was provided through the following:~~

The public had access to the agenda and any changes in dates and locations through the Regional Water Board's website at: <http://www.waterboards.ca.gov/losangeles/>.

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Regional Water Board at the address on the cover page of this Order or by email submitted to losangeles@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on ~~<Date>~~ October 18, 2018.

C. Public Hearing

The Regional Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: November 08, 2018
Time: 9:00 a.m.
Location: Metropolitan Water District of Southern California Board Room
700 North Alameda Street
Los Angeles, California

Interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony, pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

D. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a petition for review, see:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

E. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Steven Webb at (213) 576-6793 or at Steven.Webb@waterboards.ca.gov.

**ATTACHMENT G – TOXICITY REDUCTION EVALUATION (TRE) WORK PLAN OUTLINE
INFORMATION AND DATA ACQUISITION**

- I. Gather and Review Information and Data**
 - A. FOTW Operations and Performance
 - B. FOTW Influent
 - C. Effluent Data including Toxicity Results
 - D. Sludge (Biosolids) Data
- II. Evaluate Facility Performance**
- III. Conduct Toxicity Identification Evaluation (TIE)**
- IV. Evaluate Sources and In-Plant Controls**
- V. Implement Toxicity Control Measures**
- VI. Conduct Confirmatory Toxicity Testing**

ATTACHMENT H – BIOSOLIDS AND SLUDGE MANAGEMENT

BIOSOLIDS USE AND DISPOSAL REQUIREMENTS

(Note: "Biosolids" refers to non-hazardous sewage sludge as defined in 40 CFR §503.9. Sewage sludge that is hazardous, as defined in 40 CFR part 261, must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).)

I. General Requirements

- A. All biosolids generated by the Discharger shall be reused or disposed of in compliance with the applicable portions of:
 1. 40 CFR part 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated; 40 CFR § 503 Subpart B (land application) applies to biosolids placed on the land for the purposes of providing nutrients or conditioning the soil for crops or vegetation. 40 CFR § 503 Subpart C (surface disposal) applies to biosolids placed on land for disposal.
 2. 40 CFR part 258: for biosolids disposed of in a municipal solid waste landfill.
 3. 40 CFR part 257: for all biosolids use and disposal practices not covered under 40 CFR parts 258 or 503.
- B. The Discharger is responsible for assuring that all biosolids from its facility are used or disposed of in accordance with 40 CFR part 503, whether the Discharger uses or disposes of the biosolids itself, or transfers their biosolids to another party for further treatment, reuse, or disposal. The Discharger is responsible for informing subsequent preparers, appliers, and disposers of requirements they must meet under 40 CFR part 503.
- C. Duty to mitigate: The Discharger shall take all reasonable steps to prevent or minimize any biosolids use or disposal which may adversely impact human health or the environment.
- D. No biosolids shall be allowed to enter wetland or other waters of the United States.
- E. Biosolids treatment, storage, and use or disposal shall not contaminate groundwater.
- F. Biosolids treatment, storage, use or disposal shall not create a nuisance such as objectionable odors or flies.
- G. The Discharger shall assure that haulers transporting biosolids off site for further treatment, storage, reuse, or disposal take all necessary measures to keep the biosolids contained.
- H. If biosolids are stored for over two years from the time they are generated, the Discharger must ensure compliance with all the requirements for surface disposal under 40 CFR part 503 Subpart C, or must submit a written request to USEPA with the information in part 503.20 (b), requesting permission for longer temporary storage.
- I. Sewage sludge containing more than 50 mg/kg PCBs shall be disposed of in accordance with 40 CFR part 761.
- J. Any off-site biosolids treatment, storage, use, or disposal site operated by the Discharger within Region 4 (Los Angeles Region of RWQCB) that is not subject to its own Waste Discharge Requirements shall have facilities adequate to divert surface runoff from the adjacent area, to protect the site boundaries from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site to escape from the site. Adequate protection is defined as protected from at least a 100-year storm and from the highest tidal stage that may occur.
- K. There shall be adequate screening at the plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass, and other inert objects with a diameter greater than 3/8 inches are removed.

II. Inspection and Entry

The USEPA or an authorized representative thereof, upon the presentation of credentials, shall be allowed by the Discharger, directly or through contractual arrangements with their biosolids management contractors, to:

- A. enter upon all premises where biosolids are produced by the Discharger and all premises where Permittee biosolids are further treated, stored, used, or disposed, either by the Permittee or by another party to whom the Discharger transfers the biosolids for further treatment, storage, use, or disposal;
- B. have access to and copy any records that must be kept under the conditions of this permit or of 40 CFR part 503, by the Discharger or by another party to whom the Discharger transfers the biosolids for further treatment, storage, use, or disposal; and
- C. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in the production of biosolids and further treatment, storage, use, or disposal by the Discharger or by another party to whom the Permittee transfers the biosolids for further treatment, storage, use, or disposal.

III. Monitoring

- A. Biosolids shall be monitored for the metals required in 40 CFR § 503.16 (for land application) or § 503.26 (for surface disposal), using the methods in "Test Methods for Evaluating Solids Waste, Physical/Chemical Methods" (SW-846), as required in 503.8(b)(4), at the following minimum frequencies:

Amount of Sewage Sludge (Metric Tons per 365-day period)	Frequency
Greater than 0 but less than 290	Once per year
Equal to or greater than 290 but less than 1,500	Once per quarter
Equal to or greater than 1,500 but less than 15,000	Once per 60 days
Equal to or greater than 15,000	Once per month

For accumulated, previously untested biosolids, the Discharger shall develop a representative sampling plan, which addresses the number and location of sampling points, and collect representative samples.

Test results shall be expressed in milligrams pollutant per kilogram biosolids on a 100% dry weight basis.

Biosolids to be land applied shall be tested for organic nitrogen, ammonia nitrogen, and nitrate nitrogen at the frequencies required above.

- B. Biosolids shall be monitored for the following constituents at the frequency stipulated in 40 CFR § 503.16: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia nitrogen, and total solids. If biosolids are removed for use or disposal on a routine basis, sampling should be scheduled for regular intervals throughout the year. If biosolids are stored for an extended period prior to use or disposal, sampling may occur at regular intervals, or samples of the accumulated stockpile may be collected prior to use or disposal, corresponding to the tons accumulated in the stockpile for that period.
- C. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with > 5 mgd influent flow shall sample biosolids for pollutants listed under section 307 (a) of the Clean Water Act (as required in the pretreatment section of the permit for POTWs with pretreatment programs). Class 1 facilities and Federal Facilities with > 5 mgd influent flow shall test dioxins/dibenzofurans using a detection limit of < 1 pg/g during their next sampling period if they have not done so within the past 5 years and once per 5 years thereafter.

- D. The biosolids shall be tested annually or more frequently if necessary to determine hazardousness in accordance with California Law.

IV. Pathogen and Vector Control

- A. Prior to land application, the Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR § 503.32. Prior to disposal in a surface disposal site, the Permittee shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.
- B. If pathogen reduction is demonstrated using a "Process to Further Reduce Pathogens," the Permittee shall maintain daily records of the operating parameters used to achieve this reduction. If pathogen reduction is demonstrated by testing for fecal coliform and/or pathogens, samples must be collected at the frequency specified in Table 1 of 40 CFR § 503.16. If Class B is demonstrated using fecal coliform, at least seven grab samples must be collected during each monitoring period and a geometric mean calculated from these samples. The following holding times between sample collection and analysis shall not be exceeded: fecal coliform – 6 hours when cooled to <4 degrees Celsius (extended to 24 hours when cooled to <4 degrees Celsius for Class A composted, Class B aerobically digested, and Class B anaerobically digested sample types); Salmonella spp. Bacteria – 24 hours when cooled to <4 degrees Celsius (unless using Method 1682 – 6 hours when cooled to 10 degrees Celsius); enteric viruses – 6 hours when cooled to <10 degrees Celsius (extended to one month when cooled to <4 degrees Celsius).
- C. For biosolids that are land applied or placed in a surface disposal site, the Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 CFR § 503.33 (b).

V. Surface Disposal

If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

VI. Notifications

The Discharger either directly or through contractual arrangements with their biosolids management contractors shall comply with the following 40 CFR part 503 notification requirements:

A. Notification of Non-compliance

The Discharger shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of any noncompliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Permittee shall require appliers of their biosolids to notify USEPA Region 9 and their state permitting agency of the non-compliance in writing within 10 working days of becoming aware of the non-compliance.

B. Interstate Notification

If bulk biosolids are shipped to another State or to Indian Lands, the Discharger must send written notice within 60 days of the shipment and prior to the initial application of bulk biosolids to the permitting authorities in the receiving State or Indian Land (the USEPA Regional Office for the area and the State/Indian authorities).

C. Land Application Notification

A reuse/disposal plan shall be submitted to USEPA Region IX Coordinator and, in the absence of other state or regional reporting requirements, to the state permitting agency, prior to the use or disposal of any biosolids from this facility to a new or previously unreported site. The plan shall be submitted by the land applier of the biosolids and shall include a description and a topographic map of the proposed site(s) for reuse or disposal, names and addresses of the